



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,128	12/04/2003	Robert B. Nilsen	1571.2018-005	7639
21005	7590	03/13/2006	EXAMINER	
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			SEFER, AHMED N	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,128

Applicant(s)

NILSEN ET AL

Examiner

A. Sefer

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) 5-8,32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 9-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed December 12, 2005 has been entered; no new claims have been introduced.

Specification

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The recitations of **2, 4, 10 and 12** calling for, “the light-transmissive inhibiting surface” lack proper antecedent basis.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito (“Ito”) JP 11-84129.

Ito discloses in figs. 1 and 2 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent light-transmissive blocking surface (portion of region 1 within the valley) covering at least some of the valleys.

Regarding claim 2, Ito discloses a conductive coating 2 disposed on the light inhibiting surface in at least some of the valleys.

Regarding claim 3, Ito discloses a substantially transparent coating 3 disposed on the polarizer.

Regarding claim 4, the specification contains no disclosure of either the critical nature of the claimed arrangement or any unexpected results arising therefrom. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

5. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Maruyama et al. ("Maruyama") JP 2000-221324.

Maruyama discloses in figs. 1-5 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent light-transmissive blocking surface (portion of region 3 within the valley) covering at least some of the valleys.

Regarding claim 2, Maruyama discloses in fig. 4 a conductive coating 14 disposed on the light inhibiting surface in at least some of the valleys.

Regarding claim 3, Ito discloses a substantially transparent coating 3/13c disposed on the polarizer.

6. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito.

Ito discloses in figs. 1 and 2 a polarizer comprising at least one subwavelength optical microstructure including undulating surface that includes an intermittent light-transmissive blocking surface (portion of region 1 within the low area of the microstructure) in at least some low area of the microstructure.

Art Unit: 2826

Regarding claim 10, Ito discloses a conductive coating 2 disposed on at least part of the light-transmissive inhibiting surface.

7. Claims 9 and 10 are rejected under 35 U.S.C. 102(a) as being anticipated by Maruyama. Maruyama discloses in figs. 1-5 a polarizer comprising at least one subwavelength optical microstructure including undulating surface that includes an intermittent light-transmissive blocking surface (portion of region 3 within the low area of the microstructure) in at least some low area of the microstructure.

Regarding claim 10, Ito discloses a conductive coating 14 disposed on at least part of the light-transmissive inhibiting surface.

8. Claims 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Francis ("Francis") USPN 3,291,871.

Francis discloses in figs. 1-4 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent light-transmissive blocking surface 20 covering at least some of the peaks.

Regarding claim 12, Francis discloses a substantially transparent coating 25 provided on the moth-eye structure and light-transmissive inhibiting surface.

9. Claims 11 and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Maruyama.

Maruyama discloses in figs. 1-5 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent light-transmissive blocking surface 3 covering at least some of the peaks.

Regarding claim 12, Maruyama discloses a substantially transparent coating 3 provided on the moth-eye structure and light-transmissive inhibiting.

Art Unit: 2826

10. Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by Ito.

Ito discloses in figs. 1 and 2 a polarizer comprising at least one subwavelength optical microstructure including undulating surface that includes an intermittent light-transmissive blocking surface (portion of region 1 within the upper portion of the valley) covering at least some of raised area of the valleys.

11. Claim 13 is rejected under 35 U.S.C. 102(a) as being anticipated by Maruyama.

Maruyama discloses in figs. 1-5 a polarizer comprising at least one subwavelength optical microstructure including undulating surface that includes an intermittent light-transmissive blocking surface (portion of region 3 within the upper portion of the valley) covering at least some of raised area of the valleys.

12. Claims 14 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito.

Ito discloses in figs. 1 and 2 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent conductive light-blocking material (portion of region 1 within the valley) disposed in at least some of the valleys.

Regarding claim 23, Ito discloses a substantially transparent coating 3 disposed on the polarizer.

13. Claims 14 and 23 are rejected under 35 U.S.C. 102(a) as being anticipated by Maruyama.

Maruyama discloses in figs. 1-5 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent conductive light-blocking material (portion of region 3 within the upper portion of the valley) disposed in at least some of the valleys.

Regarding claim 23, Maruyama discloses a substantially transparent coating 3 disposed on the polarizer.

Art Unit: 2826

14. Claim 24 is rejected under 35 U.S.C. 102(b) as being anticipated by Ito.

Ito discloses in figs. 1 and 2 a polarizer comprising at least one subwavelength optical microstructure including undulating surface that includes an intermittent conductive light-blocking material (portion of region 1 within the lower portion of the valley) disposed in at least some of low area of the valleys.

15. Claims 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito.

Ito discloses in figs. 1 and 2 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent opaque filler (portion of region 1 within the valley) disposed in at least some of the valleys.

Regarding claim 27, Ito discloses a substantially transparent coating 3 disposed on the polarizer.

16. Claims 26 and 27 are rejected under 35 U.S.C. 102(a) as being anticipated by Maruyama.

Maruyama discloses in figs. 1 and 2 a polarizer comprising a moth-eye structure including peaks and valleys and an intermittent opaque filler (portion of region 14 within the valley) disposed in at least some of the valleys.

Regarding claim 27, Maruyama discloses a substantially transparent coating 3/13c disposed on the polarizer.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2826

18. Claims 15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maruyama.

Maruyama discloses the device structure as recited in the claim, but does not specifically disclose particles of about 0.2 μm or smaller size. However, it would have been obvious to one skilled in the art at the time the invention was made to particles of about 0.2 μm or smaller size since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claims 15, 17, 21 and 22, Maruyama reads into the limitations as the conductive material is made of conductive particles (as in claim 15), nanoparticles (as in claim 17), conductive filler (claim 21) or conductive fiber (claim 22).

Regarding claim 16, Maruyama discloses a substantially transparent coating 3 disposed on the polarizer.

Regarding claim 19, it would have been obvious to employ art-recognized materials as recited in the claim.

Regarding claim 20, the claim fails to further limit the polarizer structure but only limits its method of being positioned.

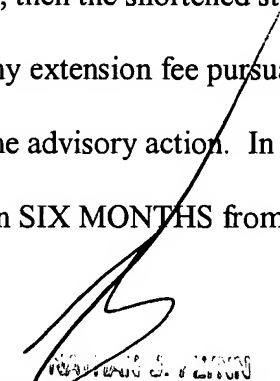
Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 2826

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


WILLIAM S. FLYNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2826

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANS
March 5, 2006